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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Conf. No.: Not Yet Assigned § Group Art Unit: Not Yet Assigned

8

International § Examiner: Not Yet Assigned

Appln. No.: PCT/JP2003/014125

§

International (05.11.2003) § Attorney Docket No.: 10407-129US

Filing Date: 05 November 2003 § (A3093MT-US1)

Title: MICROACTUATOR WITH DISPLACEMENT SENSING FUNCTION AND

DEFORMABLE MIRROR INCLUDING THE MICROACTUATOR

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97(b)

Enclosed are copies of each of the documents listed on the attached Information Disclosure Citation Form(s) PTO/SB/08A and/or B, which may be material to the patentability of this application and/or for which there may be a duty to disclose in accordance with 37 C.F.R. §1.56.

The enclosed references were cited in an International Search Report (copy enclosed) dated February 24, 2004 from the Japanese Patent Office concerning counterpart International Application No. PCT/JP2003/014125. Some of the reference were also cited and discussed in the Background section of the application.

In accordance with the official waiver posted July 11, 2003 and the waiver posted September 21, 2004, wherein the U.S. Patent and Trademark Office officially waives the requirement under 37 C.F.R. § 1.98(a) for submitting copies of each cited U.S. Patent and U.S. Patent Application Publication with respect to applications filed after June 30, 2003 and copies of co-pending applications subject to image file wrapper (IFW) filed after June 30, 2003, respectively, we have not included copies of such cited U.S. Patent and U.S. Patent Application Publications or copies of co-pending applications subject to IFW, but copies will be provided on request. However, copies of any foreign and non-patent references are attached hereto for the

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Examiner's convenience.

The filing of this Information Disclosure Statement shall not be construed as an admission that any of the listed documents constitutes prior art, nor as an admission against interest in any manner.

No fee is believed to be due in connection with the filing of this Information Disclosure Statement since it is being filed within three months of the filing date of the above-identified application. However, the Commissioner is hereby authorized to charge any deficiencies or credit any overpayments to Deposit Account No. 50-1017.

It is respectfully requested that this Information Disclosure Statement and the documents listed on the attached Form PTO/SB/08A and/or B be considered and acknowledged by the Examiner in connection with the above-identified patent application, be made of record therein, and that the listed document(s) be cited in the issued patent.

Respectfully submitted,

Yoshihiro MUSHIKA, et al.

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JDS:srn Enclosures

Form PT	O/SB/08A			Complete if Known				
l				Application Number	Not Yet Assing	jed 10/57060.		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	Herewith	10/220004		
				First Named Inventor	Yoshihiro MUSHIKA, et al.			
				Group Art Unit	Not Yet Assigned			
(use as many sheets as necessary)				Examiner Name	Not Yet Assigned			
Sheet	1	of	2	Attorney Docket Number 10407-129US (A3093MT-US1)				

		Ü.S	S. PATENT DOCUMENTS		
Exr Initials	U.S. Patent Document		Name of First Inventor of Cited Document	Date of Publication of	
	Number Kind Cod known)			Cited Document MM-YYYY	
	6,178,069	B1	SUZUKI	01-2001	
	4,737,621		GONSIOROWSKI et al.	04-1988	
	5,079,544		DeMOND et al.	01-1992	
	6,057,913		BROWN et al.	05-2000	
	6,185,167	B1	ARAI et al.	02-2001	
	6,220,707	B1	BILLE	04-2001	
	6,411,576	B1	FURUKAWA et al.	06-2002	
22.	6,430,137	B1	SAIMI et al.	08-2002	
	2002/0061917	A1	LI et al.	05-2002	

			OREIGN PAT	ENT DOCUMENTS		
Exr Initials	Country Code	Foreign Patent Documen Number	Kind Code (if known)	Name of Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY	T ₁
	JP	05-260766	Α	Matsushita Electric Works Ltd.	10-1993	*X
	JP	2002-236263	Α	Olympus Optical Co., Ltd.	08-2002	*X
	JP	09-159939	Α	Nippon Telegr & Teleph Corp.	06-1997	*X
	JP	01-253841	Α	Matsushita Electric Ind. Co., Ltd.	10-1989	*X
•	JP	07-084196	Α	Canon Inc.	03-1995	*X
	JP	09-237425	Α	Olympus Optical Co., Ltd.	09-1997	*X
	JP	10-222856	Α	Olympus Optical Co., Ltd.	08-1998	*X
	JP	10-289468	Α	Konica Corp.	10-1998	*X
	JP	11-014918	Α	Toshiba Corp.	01-1999	*X
	JP	11-231234	Α	Asahi Optical Co., Ltd.	08-1999	*X
	JP	11-305159	Α	Seiko Instruments Inc.	11-1999	*X
	JP	2000-182268	Α	Pioneer Electronic Corp.	06-2000	*X
	JP	2000-235715	Α	Sony Corp.	08-2000	*X
	EP	0 790 604	A2	Kabushiki Kaisha Toshiba Kawasaki-shi	08-1997	*X
				*Abstract Only		

	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.					
	Tadashi ARUGA, "Application of Adaptive Optics to Communication and Sensing" <i>The Journal of Institute of Electronics, Information and Communication Engineers</i> , Vol. 80, No. 12, pp. 1237-1241, (1997)					
	KRISHNAMOORTHY MALI R. et al., "Development of microelectromechanical deformable mirrors for phase modulation of light", <i>Optical Engineering</i> , Vol. 36, No. 2, pp. 542-548, (1997)					
	HORNBECK, "Digital Light Processing of For High-Brightness, High-Resolution Applications" pp. 1-14					

Examiner	Date	
Signature	Considered	

 T_1 - Place a check mark if complete document is in English; otherwise, place a letter "A" if only an English abstract is attached. 7379798 v1

Form PT	O/SB/08/	4		Complete if Known -			
				Application Number	Not Yet Assinged 1/530604		
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	Herewith 4		
STATE				First Named Inventor	Yoshihiro MUSHIKA, et al.		
				Group Art Unit	Not Yet Assigned		
(use a	(use as many sheets as necessary)			Examiner Name	Not Yet Assigned		
Sheet	2	of	2	Attorney Docket Number	10407-129US (A3093MT-US1)		

Exr Initials	U.S. Patent Document		Name of First Inventor of Cited Document	Date of Publication of	
	Number	Kind Code (if known)		Cited Document MM-YYYY	
	10/470,685		MUSHIKA et al.	03-2005	
	10/491,100		MUSHIKA	07-2004	
ing.	10/512,408		MUSHIKA et al.	10-2004	
	2005/0063285	A1	MUSHIKA et al.	03-2005	
	10/942,614		MUSHIKA	09-2004	

FOREIGN PATENT DOCUMENTS						
	F	oreign Patent Docun	nent		Date of	T ₁
Exr Initials	Country Code	Number	Kind Code (if known)	Name of Applicant of Cited Document	Publication of Cited Document MM-YYYY	
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Exr							
Initials	magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.						
	Thor JUNEAU et al., "Dual Axis Operation of a Micromachined Rate Gyroscope" <i>Transducers</i> , pp. 883-886, (1997)						
	Bishnu P. GOGOI et al., "Force Balanced Micromachined Pressure Sensors", <i>IEEE Transactions on Electron Devices</i> , Vol. 48, No. 8, pp. 1575-1584, (2001)						
	Selden B. CRARY et al., "Digital Compensation of High-performance Silicon Pressure Transducers", Sensors and Actuators, pp. 70-72, (1990)						
	Julie A. PERREAULT et al., "Adaptive optic correction using microelectromechanical deformable mirrors", <i>Optical Engineering</i> , Vol. 41, No. 3, pp. 561-566, (2002)						
	R.W. CORRIGAN et al., "Grating Light Valve ^{1M} Technology for Protection Displays", <i>Presented in the International Display Workshop, Kobe Japan</i> , Paper Number LAD5-1, (1998)						

Examiner	Date	
Signature	Consid	dered

T₁ - Place a check mark if complete document is in English; otherwise, place a letter "A" if only an English abstract is attached. 7379798 v1